

IN THE CLAIMS:

1. (Original) A method for producing an aluminide coating on a hollow article, comprising the steps of
furnishing an article having a hollow interior and an access opening to the hollow interior;
placing an aluminide coating tape into the hollow interior through the access opening; and
vapor phase aluminiding the hollow article using an external aluminum vapor source separate from the aluminide coating tape.
2. (Original) The method of claim 1, wherein the step of furnishing includes the step of
furnishing the article that has previously been in service.
3. (Original) The method of claim 1, wherein the step of furnishing includes the step of
furnishing the article comprising a nickel-base alloy.
4. (Original) The method of claim 1, wherein the step of furnishing includes the step of
furnishing the article comprising a nickel-base superalloy.
5. (Currently amended) The method of claim 1, wherein the step of furnishing includes the step of
furnishing the article comprising a cobalt-base ~~superalloy~~ alloy.
6. (Original) The method of claim 1, wherein the step of furnishing includes the step of
furnishing the article having an airfoil section having at least a portion of the airfoil hollow.
7. (Original) The method of claim 1, wherein the step of furnishing includes the step of

furnishing the article as a gas turbine blade having the hollow interior extending from a blade tip into a portion of the airfoil section.

8. (Original) The method of claim 1, wherein the step of placing includes the step of

providing the aluminide coating tape comprising an aluminum-containing alloy powder and a binder.

9. (Original) The method of claim 1, wherein the step of vapor phase aluminiding includes the step of

heating the hollow article having the aluminide coating tape in the hollow interior to a temperature of at least about 1875°F in an atmosphere comprising aluminum vapor.

10. (Original) The method of claim 1, wherein the step of vapor phase aluminiding includes the step of

heating the hollow article having the aluminide coating tape in the hollow interior to a temperature of about 1975°F +/- 25°F, in an atmosphere comprising aluminum vapor.

11. (Original) The method of claim 1, wherein the step of vapor phase aluminiding includes the step of

placing the hollow article having the aluminide coating tape in the hollow interior into an interior of an aluminiding container,

placing an aluminum-containing alloy in communication with the interior of the aluminiding container, and

heating the hollow article having the aluminide coating tape in the hollow interior and the aluminum-containing alloy to a temperature of at least about 1875°F.

12. (Currently amended) A method for producing an aluminide coating on a hollow article, comprising the steps of

furnishing an airfoil made of a nickel-base superalloy or a cobalt-base alloy and having at least a portion of the airfoil hollow as a blind hollow cavity extending from a blade tip into the airfoil but not through the entire airfoil, wherein the airfoil has previously been in service;

placing an aluminide coating tape into the hollow interior through the access opening; and

vapor phase aluminiding the hollow article using an external aluminum vapor source separate from the aluminide coating tape, wherein the step of vapor phase aluminiding includes heating the airfoil to a temperature of at least about 1875°F in an atmosphere comprising aluminum vapor.

13. (Original) The method of claim 11, wherein the step of placing includes the step of

providing the aluminide coating tape comprising an aluminum-containing alloy powder and a binder.

14. (New) The method of claim 1, wherein the step of furnishing includes the step of

furnishing the article as an uncooled gas turbine blade having the hollow interior as a blind cavity extending from a blade tip into a portion of the airfoil section but not through the entire turbine blade.

15. (New) The method of claim 1, wherein the step of furnishing includes the step of

furnishing the article as a cooled gas turbine blade having the hollow interior extending through the entire length of the turbine blade.

16. (New) A method for producing an aluminide coating on a hollow article, comprising the steps of

furnishing an airfoil made of a nickel-base superalloy and having at least a portion of the airfoil a blind hollow cavity extending from a blade tip into the airfoil but not through an entire length of the airfoil, wherein the hollow cavity has an access opening sufficiently large to receive an aluminide coating tape therethrough, and wherein the airfoil has previously been in service;

placing the aluminide coating tape into the hollow interior through the access opening, wherein the aluminide coating tape comprises an aluminum-containing alloy powder and a binder; and

vapor phase aluminiding the hollow article using an external aluminum vapor source separate from the aluminide coating tape.